Nihal Dharmasiri, PhD

Department of Biology
Texas State University
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Academic/Professional Background

Educational Background

Degree	Year	University	Area of specialization
Ph.D.	1995	Univ. of Hawaii Honolulu, USA	Plant Molecular Biology
M.Phil.	1988	Univ. of Peradeniya, Sri Lanka	Plant Pathology
B.Sc.	1982	Univ. of Peradeniya, Sri Lanka	Botany (Hons)

University Experience

Position	University	Dates
Associate Professor	Texas State University, San Marcos	2011 – to date
Assistant Professor	Texas State University- San Marcos	2005 -2011
Postdoctoral Research Assoc.	Indiana University, Bloomington & University of Texas, Austin	1999 – 2005
Postdoctoral Research Assoc.	University of Hawaii, Honolulu	1998 – 1998
Junior Researcher	University of Hawaii, Honolulu	1996 – 1997
Graduate Research Assistant	University of Hawaii, Honolulu	1992 - 1995

Professional Experience

Position	Entity	Dates
Graduate Teaching Assistant	University of Hawaii, Honolulu	1990 - 1992
Research Officer	Ceylon Institute of Scientific & Industrial Research, Colombo, Sri Lanka	1983 - 1989
Assistant Lecturer	University of Peradeniya, Sri Lanka	1982 - 1983

TEACHING

***Lecture courses*:**

Principles of Developmental Biology (Bio 4490/5490)
Plant Physiology (Bio 4455/5356)
Molecular Genetics of Plant Development (Bio7103F)
Molecular Biology of the Cell (Bio 7103D)
Seminars in Molecular & Cellular Biology (Bio 7102)
Plant Cell Physiology (PMP 670) – 1996 (Spring): University of Hawaii, Honolulu.

Supervision of Graduate Theses/Dissertations

Major Advisor:

Israel Arellano	- (MS)	- Regulation of plant auxin response by IBR5, dual specificity phosphatase.
Andrew Rodela	- (MS)	- Effect of SAUR-Calmodulin interaction on plant cell expansion
Rohit Katti	- (MS)	- The function of IBR5-NRPB4 interaction in growth and development of Arabidopsis (completed 2019).
Timothy Cioffi	- (MS)	- The role of IBR5 in regulation of $SCF^{TIR1/AFBs}$ Complex (completed 2019).
Idrees Ahmad	- (MS)	- Function of small GTPase - IBR5 interaction in plant auxin response (completed 2019).
Chandima Dhanapala	- (PhD)	- Hormonal regulation of plant development (Student from University of Colombo, Sri Lanka)(***Co-advisor***) (completed 2019).
Praveen Kumar Kathare	- (PhD)	- Functional characterization of *SAUR* genes in plant auxin response (completed 2015).
Nirmala Karunarathna	- (PhD)	- Functions of IAA28 in growth and development in *Arabidopsis thaliana* (completed 2012).
Nicholas Siepert	- (MS)	- Characterization of the IBR5-PAD1 interaction in Arabidopsis auxin response (Completed – 2017)
Damian Raymond	- (MS)	- Functional characterization of PIC30 homolog in Arabidopsis (completed 2015).
Prabesh Ghimire	- (MS)	- Functions of *ARA2* gene in plant auxin response (completed 2015).
Lauren Minter	- (MS)	- Characterization of AFB5 in plant hormone/stress Responses (completed 2015).
Elia Lopez	- (MS)	- Integration of two auxin signaling pathways through ROP GTPases (completed 2016).
Yuting Hou	- (MS)	- Characterization of *pic7* gene functions in Arabidopsis hormone response (completed 2012).
Thilanka Jayaweera	- (MS)	- Regulation of auxin receptor gene family by hormonal and abiotic stress (completed 2011).
Chamindika Siriwardana	- (MS)	- Characterization of two picloram resistant mutants from Arabidopsis thaliana (completed 2009)
Nirmala Karunarathna	- (MS)	- Isolation and characterization of *Arabidopsis* mutants with altered response to auxin (picloram) (completed 2008)

Committee member

Dinesh Pujara (PhD) - Small nuclear RNAs originated from tRNAs function as a positive regulator in plant immunity - Biology

Ji-Chul Nam (PhD) - The Arabidopsis Mediator Complex Subunit9, a MORC1 interacting protein, is a positive regulator of plant immunity (Completed, 2020) - Biology

Oluwadamilare Afolabi (MS) - Identification of transcriptome dynamic patterns and their cognate cis-elements in defense genes in Arabidopsis (Completed, 2020) – Biology

Rafea Sultana Rea (MS) - Effect of amorphous silica (Eco-silTM) on growth and nutrient accumulation in lettuce (*Lactuca sativa*) (Completed, 2020) - Agriculture

Sarah Eisenmenger (MS) - Influence of priority effects on the productivity yield of a corn-bean intercropping system – (Completed – 2018) -Biology

Yogendra Bordia (PhD) - Characterization of chromatin dynamics under biotic stress in Arabidopsis – (Completed-2017)-Biology

April Bonnard (MS) - Histone variant H2A.Z substitution mediated by the SWR1-LIKE complex is a novel transcriptional regulatory mechanism controlling defense genes and immunity in plants. – (Completed 2016)-Biology

Rupesh Agrahari (MS) - Applications of Bayesian networks models in studying Acute Myeloid Leukemia (AML) – (completed 2016) Computer Science.

Alicia Taylor (MS) - Nanoparticle influence on bacterial mutagenesis (completed 2010)-Biology.

Matthew Kay (MS) - W60 and PB-1 phage infection in *Escherichia coli* and *Psedomonas aeruginosa* in mixed biofilm communities. (completed 2010)- Biology

Robert C. DeLeon (MS) - *In vivo* modulation of redox and nitric oxide signaling by Lamiceae phytochemicals. - FCS

Elizabeth Capalbo (MS) - Diurnal and circadian rhythms in the retina of Zebrafish (completed 2009). – Biology

Sunni Taylor - (MS) - Reproductive isolation and hybrid speciation in Louisiana Iris. (completed 2008). - Biology

Katie E. Soul - (MS) - Differential gene expression in *Danio rerio* during optic nerve regeneration (graduated 2008) - Biology

Shobhit Sharma - (MS) - Regulation of pigment granule movement in bluegill RPE. - Biology

Varsha Radhakrishnan – (MS) - Molecular characterization and expression of $G_{q/11}$ protein in fishes. (completed 2007). - Biology

Publications:

Arellano I, Anne S, **Dharmasiri N**. (2021) Mechanisms of action of auxinic herbicides: Current perspectives. **Agriculture. (***submitted***).**

Kathare PK, Dharmasiri S, Arellano I, **Dharmasiri N.** (2020) Interaction of SAUR53 and its close homologs with Calmodulin may play a role in early development in Arabidopsis. ***Plant Mol. Biol. Rep***. **38**; 343–351. DOI: 10.1007/s11105-020-01199-x. ***(Cover Image)***.

Kathare PK, Dharmasiri S, Vincil ED, Routray , Ahmad I, Roberts DM, **Dharmasiri N.** (2019) Arabidopsis PIC30 encodes a Major Facilitator Superfamily (MFS) transporter responsible for the uptake of picolinate herbicides. ***Plant J***. DOI: 10.1111/tpj.14608.

Kathare PK, Dharmasiri S, **Dharmasiri N** (2018) SAUR53 regulates organ elongation and apical hook development in Arabidopsis. ***Plant Signaling & Behavior***. DOI: 10.1080/15592324.2018.1514896.

Kathare PK, Cioffi TJ, **Dharmasiri N**, Dharmasiri S (2017) Auxin. In: **eLS**. John Wiley & Sons, Ltd: Chichester, UK. DOI: 10.1002/9780470015902.a0020090.pub2

Jayaweera T, Siriwardana C, Dharmasiri S, Quint M, Gray WM and **Dharmasiri N** (2014) Alternative splicing of Arabidopsis *IBR5* pre-mRNA generates two IBR5 isoforms with distinct and overlapping functions. ***PLoS ONE***. 9(8): e102301. doi:10.1371/journal.pone.0102301

Dharmasiri S, Jayaweera T, and **Dharmasiri N.** (2013) Plant hormone signaling: Current perspectives on perception and mechanisms of action. ***Cey. J. Sci.(Bio Sci.)*** 1-17 (Lead article).

Taylor AA, Aron GA, Beall GW, **Dharmasiri** N, Zhang Y, McLean RJC (2012) Carbon and Clay Nanoparticles Induce Minimal Stress Responses in Gram Negative Bacteria and Eukaryotic Fish Cells. ***Environmental Toxicology*.** 29: 961-968.

Dharmasiri S, Harrington HM, **Dharmasiri N.** (2010) Heat shock modulates phosphorylation status and activity of nucleoside diphosphate kinase in cultured sugarcane cells. ***Plant Cell Rep***. 29:1305-1314.

Savaldi-Goldstein S, Baiga TJ, Pojer F, Dabi T, Butterfield C, Parry G, Santer A, **Dharmasiri N,** Tao Y, Estelle M, Noel JP, Chory J. (2008) New auxin analogs with growth-promoting effects in intact plants reveal a chemical strategy to improve hormone delivery. ***Proc Natl Acad Sci. USA*** 105: 15190-15195.

Dharmasiri N., Dharmasiri S., Weijers D., Karunarathne N., Jurgen G. and Estelle M. (2007) AXL1 and AXR1 have redundant functions in RUB conjugation and growth and development in Arabidopsis. ***Plant J.*** 52:114-123.

Dharmasiri S, Swarup R, Mockaitis K, **Dharmasiri N**, Singh SK, Kowalchyk M, Marchant A, Sandberg G, Bennett M, Estelle M. (2006) AXR4 is required for asymmetric localization of the auxin influx facilitator AUX1. ***Science*** 312: 1218-1220. *(Editor's choice. Paper was cited among top 10 papers in biology by Faculty of 1000)*

Navarro L., Dunoyer P., Jay F., Arnold B., **Dharmasiri N**., Estelle M., Voinnet O., Jones J.D.G (2006) A plant MiRNA contributes to Arabidopsis basal resistance by repressing Auxin signaling. ***Science*** 312: 436-439***.*** *(Editor's choice).*

Dharmasiri N, Dharmasiri S, Weijers D, Lechner E, Yamada M, Hobbie L, Ehrismann JS, Jurgens G, Estelle M. (2005) Plant Development Is Regulated by a Family of Auxin Receptor F Box Proteins. ***Dev. Cell***. 9:109-119. *(This paper was cited among most viewed top ten papers by Faculty of 1000).*

Dharmasiri N., Dharmasiri S. and Estelle M. (2005) The F-box protein TIR1 is an auxin receptor. ***Nature*** 435: 441-445. *(Editor's choice. This paper was ranked number 1 of the top ten biology papers in June 2005 by Faculty of 1000)*

Dharmasiri N. and Estelle, M. (2004) Auxin signaling and regulated protein degradation. ***Trends Plant Sci****.* 9:302-308.

Xiaoqing Yang X., Lee S., Soo J-H, Dharmasiri S., **Dharmasiri N**., Lei G., Jensen C., Hangarter R., Hobbie L. and Estelle M. (2004) The IAA1 protein is encoded by AXR5 and is a substrate of SCF^{TIR1}. ***Plant J***. 40:772-782.

Dharmasiri N, Dharmasiri S, Jones AM, Estelle M. (2003) Auxin action in a cell-free system. ***Curr Biol.*** 13(16): 1418-22. *(This paper was cited among top ten papers in biology by Faculty of 1000).*

Hellmann H, Hobbie L, Chapman A, Dharmasiri S, **Dharmasiri N**, del Pozo C, Reinhardt D, Estelle M. (2003) Arabidopsis AXR6 encodes CUL1 implicating SCF E3 ligases in auxin regulation of embryogenesis. ***EMBO J.*** 22(13): 3314-25.

Dharmasiri S**, Dharmasiri N**, Hellmann H, Estelle M. (2003) The RUB/Nedd8 conjugation pathway is required for early development in Arabidopsis. ***EMBO J.*** 22(8): 1762-70.

Liu S, Bugos RC, **Dharmasiri N**, Su WW. (2001) Green fluorescent protein as a secretory reporter and a tool for process optimization in transgenic plant cell cultures. ***J Biotechnol.*** 87(1): 1-16.

Lu, Y.T., **Dharmasiri, M.A.N**., and Harrington, H.M. (1995) Characterization of a cDNA encoding a novel heat-shock protein that binds to calmodulin. ***Plant Physiol.*** 108: 1197-1202.

Harrington, H.M., Dash, S., **Dharmasiri, N**. and Dharmasiri, S (1994) Heat-shock proteins: Search for functions. ***Australian J. Plant Physiol.***21: 843-855.

Abstracts/Presentations:

Arellano I, Anne S, Dharmasiri S **Dharmasiri N** (2021) Indole-3-Butryic acid Response5 (IBR5) activity is regulated by calcium and calmodulin. ***ASPB (Southern Section) meeting, (Virtual).***

Hernandez K, Dhanapala C, Dharmasiri S and Dharmasiri N (2020) Plant auxin response is regulated by Ca^{2+}/calmodulin. ***27th Annual Biology Colloquium***, *Texas State University, San Marcos*.

Arellano I, Siepert N, Kathare P, Dharmasiri S and Dharmasiri N (2020) IBR5 interacts with a subunit of 26S proteasome to regulate Arabidopsis auxin response. ***27th Annual Biology Colloquium***, *Texas State University, San Marcos*.

Painter H, Kathare P, Dharmasiri S and **Dharmasiri N** (2020) Auxin mediated cell elongation may be regulated by SAUR-Calmodulin interaction. ***27th Annual Biology Colloquium***, *Texas State University, San Marcos*.

Cioffi T, Dharmasiri S and **Dharmasiri N** (2019) IBR5 affects steady-state levels of $SCF^{TIR1/AFBs}$ components to regulate auxin response. ***24rd Annual Biology Colloquium***, *Texas State University, San Marcos*.

Ahmad I, Kathare PK, Ghimire P, Lopez E, Dharmasiri S, Dharmasiri N (2019) IBR5 and small GTP binding interaction: Genetics and molecular connection to auxin signaling. ***24th Annual Biology Colloquium***, *Texas State University, San Marcos*.

Katti R, Siepert N, Kathare PK, Dharmasiri S, and **Dharmasiri N** (2019) Role of IBR5-NRBP4 interaction in Arabidopsis growth and development. ***24th Annual Biology Colloquium***, *Texas State University, San Marcos*.

Cioffi T, Dharmasiri S, **Dharmasiri N** (2018) IBR5 affects steady-state levels of $SCF^{TIR1/AFBs}$ components to regulate auxin response. ***ASPB (Southern Section) meeting, New Orleans, LA.***

Ahmad I, Kathare PK, Ghimire P, Lopez E, Dharmasiri S, **Dharmasiri N** (2018) IBR5 interacts with GTP binding proteins to regulate epidermal cell patterning in Arabidopsis. ***ASPB (Southern Section) meeting, New Orleans, LA.***

Katti R, Seipert N, Kathare PK, Dharmasiri S, Dharmasiri N (2018) IBR5-AtNRPB4 interaction suggests a role for IBR5 during heat stress. ***ASPB (Southern Section) meeting, New Orleans, LA.***

Ahmad I, Lopez E, Kathare PK, Dharmasiri S, Dharmasiri N (2018) Role of IBR5 - GTP binding proteins interaction as a regulator of plant cell morphology. ***10th Annual International Research Conference for Graduate Students,*** *Texas State University.*

Sanchez E, Dharmasiri S and Dharmasiri N (2018) Characterization of the role of PIC30 protein as a salicylic acid tramsporter in Arabidopsis. ***23rd Annual Biology Colloquium***, *Texas State University, San Marcos*.

Katti R, Siepert N, Kathare PK, Dharmasiri S, and **Dharmasiri N** (2018) Characterization of IBR5-AtNRPB4 interaction in plant growth and development. ***23rd Annual Biology Colloquium***, *Texas State University, San Marcos*.

Cioffi T, Dharmasiri S and **Dharmasiri N** (2018) Role of IBR5 in auxin pathway through interaction with the $SCF^{TIR1/AFBs}$ complex. ***23rd Annual Biology Colloquium***, *Texas State University, San Marcos*.

Ahamad I, Kathare P, Ghimire P, Lopez E, Dharmasiri S, and Dharmasiri N (2018) Role of IBR5-GTP binding proteins in plant auxin response. ***23rd Annual Biology Colloquium***, *Texas State University, San Marcos*.

Cioffi T, Samaraweera P, Dharmasiri S, **Dharmasiri N** (2017) IBR5 may regulate auxin responses in Arabidopsis through interaction with SCF Complex. ***ASPB (Southern Section) meeting, Orlando, FL.***

Ahmad I, Kathare P, Ghimire P, Lopez E, Dharmasiri S, **Dharmasiri N** (2017) IBR5 interacts with GTP binding proteins to regulate plant auxin response. ***ASPB (Southern Section) meeting, Orlando, FL.***

Jayaweera T, Kathare P, Lopez E, Ghimire P, Dharmasiri S, Lewsey MG, Joseph Ecker JR, and **Dharmasiri N** (2016) IBR5 is a central regulator of plant hormonal responses. ***ASPB Annual Conference, Austin, TX.***

Dharmasiri S, Kathare P, Dharmasiri N (2016) Mutations in *Arabidopsis PIC30* confer increased resistance to picloram and drought. ***ASPB (Southern Section) meeting, Denton, TX.***

Dharmasiri S, Kathare PK, Ginsberg E, Dharmasiri N (2015) Characterization of an Arabidopsis picloram transporter and its tomato homolog for developing herbicide and drought resistance in crop plants. ***42nd Annual Conference of Plant Growth Regulation Society of America, Kona, Hawaii.***

Lopez E, Kathare PK, Jayaweera T, Ghimire P, Siepert N, Raymond D, Minter L, Dharmasiri S, **Dharmasiri N** (2015) Regulation of plant auxin response by IBR5, a dual specificity phosphatase. ***42nd Annual Conference of Plant Growth Regulation Society of America, Kona, Hawaii.***

Dharmasiri N, Kathare PK, Jayaweera T, Lopez E, Ghimire P, Siepert N, Raymond D, Minter L, Dharmasiri S (2015) Regulation of plant auxin response by IBR5, a dual specificity phosphatase. ***ASPB (Southern Section) meeting, Dauplin Island, AL***.

Jayaweera T, Hou Y, DiGiovanni J, Hall J, Minter L, Dharmasiri N (2015) Genetic interaction of HY5 and IBR5 link light and hormonal signaling pathways. ***ASPB Annual Conference, Minneapolis, MN.***

Kathare PK, Dharmasiri S, Jayaweera T, Minter L, **Dharmasiri N** (2014) *Small Auxin Up RNA53* functions in auxin and ethylene signaling in Arabidopsis. ***111th Annual meeting of Southern Association of Agricultural Scientists, Dallas, TX.*** *(Invited presentation).*

Jayaweera T, Dhanapala C, Kathare P, **Dharmasiri N**. (2014). IBR5 links auxin and calcium signaling pathways in plants. ***111th Annual meeting of Southern Association of Agricultural Scientists, Dallas, TX.*** *(Invited presentation).*

Jayaweera T, **Dharmasir N** (2014) 26S proteasome pathway regulates IBR5.1protein level in Arabidopsis. ***ASPB Annual Conference, Portland, OR.***

Kathare PK, Dharmasiri S, **Dharmasiri N** (2014) PIC82 is a membrane protein involved in picloram transport. ***ASPB Annual Conference, Portland, OR.***

Jayaweera T, Dharmasiri S, Dhanapala C, Siriwardana C, **Dharmasiri N** (2013) Involvement of post-transcriptional regulation of *IBR5* in plant auxin response. ***Conference on Post-transcriptional gene regulation of plants, Providence, RI.***

Jayaweera T, **Dharmasir N** (2013) Expression of TIR1/AFB auxin co-receptors are differentially regulated by other plant hormones and abiotic stress. ***ASPB (Southern Section) meeting, Little Rock, AR.***

Praveen K. Kathare, Dharmasiri S, Jayaweera T, **Dharmasiri N** (2013) Functional characterization of AtSAUR53 in plant auxin response. ***ASPB (Southern Section) meeting, Little Rock, AR.***

Dharmasiri N, Hou Y, Dharmasiri S, Villarieal J, Karunarathna N (2013) Auxin resistant mutant *pic7-1* functions in multiple hormone response pathways. ***ASPB (Southern Section) meeting, Little Rock, AR.***

Kathare PK, Dharmasiri S, Jayaweera T, Minter L, **Dharmasiri N**. (2013) SAUR53 is involved in organ expansion and apical hook development. ***ASPB (Southern Section) meeting, Little Rock, AR.***

Jayaweera T, Chandima Dhanapala, **Dharmasiri N** (2013) Calcium signaling regulates plant auxin response through the dual specificity phosphatase. ***ASPB Annual Conference, Providence, RI.***

Dhanapala C, Kathare PK, Dharmasiri S, Rajapakse S, Saputhanthri P, **Dharmasiri N** (2013) Regulation of Aux/IAA functions is a complex process. (2013) ***Proceeding of the Institute of Biology, Sri Lanka.***

Dharmasiri S, Karunarathna N, Jayaweera T, Kathare PK, Hou Y, Dhanapala C, Song Y, **Dharmasiri N** (2012) Environmental regulation of plant auxin response. ***109th Annual meeting of Southern Association of Agricultural Scientists, Birmingham, AL.***

Karunarathna N, Dharmasiri S and Dharmasiri N (2012) Picloram induced adventitious root formation in *Arabidopsis* mutant *iaa28-2* is regulated by auxin co-receptor AFB1. ***ASPB Annual Conference, Austin, TX.***

Jayaweera T, Siriwardana C, Dharmasiri S, Quint M, Gray W and Dharmasiri N. (2012) Characterization of new mutant alleles of *IBR5* indicates the relevance of its catalytic domain in plant auxin response. ***ASPB Annual Conference, Austin, TX.***

Katharec PK, Dharmasiri S, Jayaweera T and Dharmasiri N (2012) *SAUR53* regulates apical hook development through calcium/calmodulin pathway. ***ASPB Annual Conference, Austin, TX.***

Dharmasiri S, Jayaweera T, Kathare PK, Karunarathna N, Hou Y, Hartgrove K, Albers S, **Dharmasiri N** (2011) Modulation of plant auxin response by environmental stresses. ***108th Annual meeting of Southern Association of Agricultural Scientists, Corpus Christi, Texas.***

Dharmasiri S, Jayaweera T, Kathare PK, Karunarathna N, Hou Y, **Dharmasiri N** (2011) Plant auxin response: Opportunities for agricultural biotechnology. ***International Conference on "Biotechnology for Better Tomorrow 2011" Aurangabad, India***.

Dharmasiri S, Devolld B and **Dharmasiri N** (2011) Semi-dominant mutation in pic30 gene in Arabidopsis conveys resistance to picolinate herbicides. ***ASPB Annual Conference, Minneapolis, MN.***

Karunarathna N., Dharmasiri S., Jayaweera T., Kathare P., Koke J., and Dharmasiri N. IAA28 may have multiple functions in plant growth and development. (2011), ***ASPB Annual Conference, Minneapolis, MN.***

Karunarathna N., Dharmasiri S., Jayaweera T., Kathare P. and **Dharmasiri N.** (2011) Functions of IAA28 in linking plant responses to environmental cues. ***International research conference for graduate students, Texas State University- San Marcos, TX.***

Praveen Kumar, Dharmasiri S, Jayaweera T, Hartgrove K, **Dharmasiri N** (2011), Role of SAUR53 in Plant Growth and Development. ***International Research Conference for Graduate Students, Texas State University- San Marcos, Texas.***

Hou Y, Dharmasiri S, Villareal J, Karunarathna N, **Dharmasiri N** (2011) Auxin resistant mutant *pic7* functions in multiple hormone response pathways in Arabidopsis. ***International Research Conference for Graduate Students, Texas State University- San Marcos, Texas.***

Jayaweera T, Dharmasiri S and **Dharmasiri N** (2010) Regulation of the expression of *PIC115* gene in Arabidopsis. ***American Association for the Advancement of Science– SWARM Meeting, Houston, Texas.***

Karunarathna N, Dharmasiri S and **Dharmasiri N** (2010). The gain-of-function mutation *iaa28-2* in Arabidopsis causes severe defects in growth and development. ***American Association for the Advancement of Science –SWARM meeting, Houston, Texas. (Honorable Mention – Best Poster).***

Kathare PK, Dharmasiri S, Dharmasiri N (2010) Characterization of a Small Auxin Up Regulatetd (SAUR) Gene in Arabidopsis apical hook Development. ***International Research Conference for Graduate Students, Texas State University, San Marcos, Texas.***

Jayaweera T, Dharmasiri S, Siriwardhana C, Dharmasiri N. (2010) Plan auxin response is modulated through ABA signaling in response to environmental stress ***International Research Conference for Graduate Students, Texas State University, San Marcos, Texas.***

Hou Y, Dharmasiri S, Karunarathna N, Dharmasiri N. (2010) Identification and Characterization of *pic7,* a novel Arabidopsis mutant resistant to auxin ***International Research Conference for Graduate Students, Texas State University, San Marcos, Texas.***

Jayaweera TD, Dharmasiri S, **Dharmasiri N** (2010) Regulation of auxin signaling through MAPK pathway. ***15th Annual Biology Student Colloquium, Department of Biology, Texas State University-San Marcos.***

Karunarathna N, Dharmasiri S, **Dharmasiri N** (2010) Functions of IAA28 in Arabidopsis growth and development. ***15th Annual Biology Student Colloquium, Department of Biology, Texas State University-San Marcos.***

Siriwardana C, Karunarathna N, Dharmasiri S, Albers S, Koke J and **Dharmasiri N** (2009) Characterization of *pic59,* a novel Arabidopsis mutant associated with auxin response. ***9th International Plant Molecular Biology Congress***, ***St. Louis, Missouri***.

Ulghani A, Villareal J, Boyd B, Dharmasiri S and **Dharmasiri N** (2009) Characterization of *pic7*, an auxin resistant mutant of *Arabidopsis thaliana*. ***International Research Conference for Graduate Students, Texas State University, San Marcos, Texas.***

Karunarathna N, Albers S, Dharmasiri S and **Dharmasiri N** (2009) Isolation and characterization of a putative auxin resistant mutant, *ada2* that regulates growth and development of *Arabidopsis thaliana.* ***International Research Conference for Graduate Students, Texas State University, San Marcos, Texas.***

Albers S, Karunarathna N, Dharmasiri S and **Dharmasiri** N (2009) Arabidopsis *ada1* mutant exhibits severe defects in tropic responses and growth and development. ***ASPB (Southern section) Annual meeting, Austin, Texas.***

Padgett C, Jaster C, Dharmasiri S and **Dharmasiri N** (2009) Isolation and characterization of enhancers and suppressors of Arabidopsis *afb5.* ***ASPB (Southern section) Annual meeting, Austin, Texas***.

Siriwardana C, Karunarathna N, Dharmasiri S, Gunathilake A and **Dharmasiri N** (2009) Characterization of *pic59,* a novel Arabidopsis mutant associated with auxin signaling pathway. ***ASPB (Southern section) Annual meeting, Austin, Texas***.

Karunarathna N, Dharmasiri S, Siriwardana C and **Dharmasiri N** (2009) Auxin resistant mutant *pic11* encodes IAA28 that regulates growth and development of *Arabidopsis thaliana.* ***ASPB (Southern section) annual meeting, Austin, Texas***.

Gunathilake A, Karunarathna N, Devold B, Dharmasiri S and **Dharmasiri N** (2009) Arabidopsis *pic64* mutation defines a novel gene involved in Auxin response. ***ASPB (Southern section) Annual meeting, Austin, Texas***.

Gunathilake A, Dharmasiri S and **Dharmasiri N** (2008) Characterization of *pic64*, an Arabidopsis mutant that is resistant to auxinic herbice 2,4-D. ***105th Annual meeting of SAAS (Biochemistry & Biotechnology), Dallas, TX***.

Karunarathne N, Dharmasiri S and **Dharmasiri N**. (2008) *pic11*, a mutant that is resistant to the auxinic herbicide picloram, causes growth and development defects in Arabidopsis. ***105th Annual meeting of SAAS (Biochemistry & Biotechnology), Dallas, TX.***

Dharmasiri N, Dharmasiri S, Guanathilake A, Karunarathne N, Siriwardana C and Collier C. (2008) Characterization of new auxin response mutants in Arabidopsis. ***105th Annual meeting of SAAS (Biochemistry & Biotechnology), Dallas, TX.***

Dharmasiri S, Garcia S, Karunaratna N, Collier C, Devolled B, **Dharmasiri N** (2008) Characterization of the Arabidopsis mutant *pic30* that is specifically resistant to auxinic herbicide picloram. ***19th International Conference on Arabidopsis Research, Montreal, Canada.***

Dharmasiri N, Dharmasiri S, Gunathilake A, Karunarathne N, Siriwardana C and Collier C. (2008) Characterization of new auxin response mutants in Arabidopsis. ***105th Annual meeting of SAAS (Biochemistry & Biotechnology), Dallas, TX.***

Dharmasiri S, Devolld B, Shayegani R, Monks Cory, **Dharmasiri N** (2006) What is an auxin: Structural requirements necessary for auxin activity. ***FASEB summer research Conferences, Saxton River, VT.***

Dharmasiri N., Dharmasiri S., and Estelle M. (2005) TIR1 and related F-box proteins function as auxin receptors in plants. ***Gordon Research Conferences (Mechanotransduction & Gravity Signaling In Biological Systems). University of New England, Biddeford, ME.***

Dharmasiri S, Mockaitis K, Swarup R, **Dharmasiri N**, Bennett M, Estelle M (2005) Molecular and genetic characterization of the Arabidopsis AXR4 protein suggest an involvement in auxin influx and AUX1 function. ***ASPB Annual Conference, Seattle, Washington.***

Dharmasiri N., Dharmasiri S. and Estelle M. (2004). Auxin signaling in plants: Where is the auxin receptor? ***Gordon Research Conferences (Plant Molecular Biology), Plymouth, NH.***

Estelle M., Dharmasiri S., **Dharmasiri N**, Lechner L, Mooney S. (2004) Auxin response requires SCF-dependent degradation of the AUX/IAA proteins. ***18th International Conference on Plant growth Substances. Canberra, Australia.***

Dharmasiri N., Dharmasiri S, Ge L, Lechner E, Mokaitis K, Moon J, Mooney S, Parry G, Ren H, Yamada M. and Estelle M. (2004) Auxin response is mediated by a family of ubiquitin protein ligases. ***FASEB summer Research Conferences. Saxtons River, VT.***

Mockaitis K., Dharmasiri S., **Dharmasiri N.** and Estelle M. (2004) Profiling Primary Auxin Responses and Transcriptional Regulation Mediated by AXR1 and SCF^{TIR1} Functions. ***15th International conference on Arabidopsis Research., Berlin. 120.***

Dharmasiri S., **Dharmasiri N.,** Mooney S. and Estelle M (2004) Regulated degradation of AUX/IAA proteins through a family of SCF F-box proteins. ***15th International conference on Arabidopsis Research. Berlin. 81.***

Dharmasiri S., **Dharmasiri N**., and Estelle M. (2004) Characterization of a family of SCF E3 ligases involved in auxin response in *Arabidopsis*. ***ASPB conference, Orlando, FL.***

Dharmasiri N., Dharmasiri S. and Estelle M (2003) Auxin promotes AUX/IAA-SCF interaction through a soluble receptor. ***14th International conference on Arabidopsis Research, Madison, WI. 64.***

Dharmasiri, S**., Dharmasiri, N**., Mooney, S., and Estelle, M. (2003) Auxin response in Arabidopsis is mediated by family of SCF complexes. ***14th International conference on Arabidopsis Research. Madison, WI. 324.***

Hellmann, H., Hobbie, L., Dharmasiri, S., **Dharmasiri, N**., and Estelle, M. (2003) The CUL1 protein is required for auxin signaling in Arabidopsis. ***14th International conference on Arabidopsis Research. Madison, WI. 337.***

Dharmasiri, M.A.N., and Estelle, M (2001) AXR1 homologue AXL1 is involved in auxin response in Arabidopsis. ***12th International conference on Arabidopsis Research. Madison, WI. 267***

Li, X**., Dharmasiri, M.A.N.,** and Harrington, H.M. (2000) Characterization of a Calcium-CaM regulated potassium ion channel in Arabidopsis. ***Plant physiol. (Supp). 123: 151***

Dharmasiri, M.A.N. and Harrington, H.M (1997) Promoter of a calmodulin binding protein gene confers heat inducibility of GUS in transgenic tobacco. ***Plant Physiol. (Suppl.) 115: 275.***

Dharmasiri S., **Dharmasiri M.A.N**., and Harrington HM (1997) Nucleoside diphosphate kinases and calmodulin binding proteins in plants. ***Mult-institutional Plant protein Phosphorylation Group meeting. Jackson Hole, WY.***

Dharmasiri, M.A.N. and Harrington, H.M. (1996) Tobacco glutamate decarboxylase is a calmodulin binding heat shock protein***. Pacific Sci. 50:239.***

Dash S., Dharmasiri S., **Dharmasiri M.A.N.** and Harrington HM (1995) Modulation of calmodulin binding proteins and nucleoside diphosphate kinase by heat shock. ***Multi-institutional Plant Protein Phosphorylation Group meeting. Breckenridge, CO.***

Dharmasiri, M.A.N. and Harrington, H.M. (1994) Isolation of a heat-shock induced calmodulin binding protein gene from tobacco cells. ***Plant Physiol.(suppl.)105(1):174.***

Dash, S., Dharmasiri, S., **Dharmasiri, N**., Harrington, H.M. (1994) Protein phosphorylation and signal transduction during heat shock. ***Multi-institutional Plant Protein Phosphorylation Group meeting. Portland, OR.***

Kolonna, K.A.S., Abeyrathne, L.N.P. and **Dharmasiri, M.A.N.** (1988) Effect of composted paddy straw on the cultivation of straw mushrooms (*Volvariella* sp.). ***Proc. Sri Lanka Assoc. Adv. Sci. 44(1)114.***

Dharmasiri, M.A.N., Kolonna, K.A.S., Tennakoon, K. and Chandralatha, Y.T. (1987) A study on some factors effecting the growth and yield in mushrooms. *Pleurotus ostreatus* and *Volvariella* sp. ***Proc. Sri Lanka Assoc. Adv. Sci. 43(1) 43***.

Dharmasiri, M.A.N., Jayatissa, P.M. and Adikaram, N.K.B. (1986) Pectinase and protease enzyme production by two *Colletotrichum* species having differential disease development in papaya fruit**. *Proc. Sri Lanka Assoc. Adv. Sci.41(1)120*.**

Dharmasiri, M.A.N., Jayatissa, P.M. and Adikaram N.K.B. (1985) Some factors underlying the resistance of immature papayas to anthracnose disease (*Colletotrichum gloeosporioides* (Penz.) Sacc.). ***Proc. Sri Lanka. Assoc. adv. Sci. 41(1):56.***

Dharmasiri, M.A.N., Pathirana, R.A., Weerawansa, G.G. and Jayatissa, P.M (1984) Effect of rice bran and composted straw on the yield of straw mushrooms (*Volvariella* sp.). ***Proc. Sri Lanka Assoc Adv. Sci. 40(1):56.***

Dharmasiri, M.A.N., Upasiri, K and Balasubramanium, S (1984) The effect of water stress on free amino acid composition of rice (*Oryza sativa* L.). ***Proc. Sri Lanka Adv. Sci. 40(1):58***

Patents:

Dharmasiri N, Dharmasiri S and Kathare P (2021) Development and use of modified plants and seeds that are resistant to picolinate herbicides and environmental stress (16/196,973) – approved.

Invited Presentations:

(2020) Auxin: A tiny molecule with a big role in plant life. How does it work? ***University of Dubuque, Dubuque, IA.***

(2016) IBR5 is a central regulator of plant hormonal responses. ***ASPB Annual Conference, Austin, TX.***

(2014) Complexity of plant auxin response: Dissecting the signaling network. ***111th Annual meeting of Southern Association of Agricultural Scientists, Dallas, TX.***

(2014) Plant auxin response: convergence of signaling pathways. ***Department of Biology, University of North Texas, Denton, TX.***

(2013) Auxin resistant mutant *pic7-1* functions in multiple hormone response pathways. ***ASPB (Southern Section) meeting, Little Rock, AR.***

(2013) Complexity of plant auxin response; dissecting the signaling network. ***Department of Molecular biology & Biotechnology, University of Peradeniya, Sri Lanka.***

(2013) Involvement of post-transcriptional regulation of *IBR5* in plant auxin response. ***Conference on Post-transcriptional gene regulation of plants, Providence, RI.***

(2013) Plant auxin response; convergence of two signaling pathways. ***Department of Biology, Louisiana State University, Baton Rouge, LA***

(2012) Environmental regulation of plant auxin response. ***109th Annual meeting of Southern Association of Agricultural Scientists, Birmingham, AL.***

(2011) Mechanisms of plant auxin response: Will it end in TIRs? ***Department of Biology, Texas A&M University, College Station, Texas.***

(2011) Modulation of plant auxin response by environmental stresses. ***108th annual meeting of Southern Association of Agricultural Scientists, Corpus Christi, Texas.***

(2011) Plant auxin response: Opportunities for agricultural biotechnology. ***International Conference on "Biotechnology for Better Tomorrow 2011" Aurangabad, India***.

(2010) Molecular mechanisms of plant auxin signaling***. Department of Botany, University of Peradeniya, Sri Lanka.***

(2010) Mechanisms of plant auxin response: Lessons from Arabidopsis mutants to auxinic herbicides. ***USDA-ARS, Mississippi.***

(2008) Molecular mechanisms of auxin signaling in plants. ***College of Life Sciences, Wuhan University, China.***

(2008) Characterization of new auxin response mutants in Arabidopsis. ***105th Annual meeting of SAAS (Biochemistry & Biotechnology), Dallas, TX.***

(2008) Dissecting the molecular mechanisms of auxin signaling in plants. ***Biology Department, Texas State University, San Marcos, TX.***

(2006) Auxin action in plants: TIRs for the receptor. ***Plant Biology Section, University of Texas at Austin, TX.***

(2006) Biochemical search for auxin receptors; An answer to a century old question. ***Department of Biology, University of Texas-San Antonio.***

(2005) TIR1 and related F-box proteins function as auxin receptors in plants. ***Gordon Research Conferences (Mechanotransduction & Gravity Signaling In Biological Systems). University of New England, Biddeford, ME.***

(2005) Auxin Signaling in Plants: The Quest for the Auxin Receptor. ***Dept. of Botany, University of Peradeniya, Sri Lanka.***

(2004) Auxin signaling in plants: Where is the auxin receptor? ***Gordon Research Conferences (Plant Molecular Biology). Plymouth, NH.***

(2003) Auxin promotes Aux/IAA-SCF interaction through a soluble receptor. ***14th International conference on Arabidopsis Research (NAASC Choices). Madison, WI.***

(1997) Calcium signaling in plants. ***Dept. of Botany, University of Peradeniya, Sri Lanka.***

(1987) Cultivation of edible mushrooms. ***Institute of Biology. Sponsored by Hiat Development Company, Sri Lanka***

Grants and Contracts

2010: Characterization of auxin signaling, cell Ca^{2+} and MAP kinase pathway in plant stress response. Texas State University. ($ 80,000.00)

2009: Characterization of three new Arabidopsis mutants with altered response to Auxin – NSF CAREER ($ 549,999.00)

2008: Characterization of two new picloram resistant mutants from plants. Research Enhancement Grant, Texas State University. ($ 8000.00).

2006: Functions of SAUR genes in auxin response. Research Enhancement Grant, Texas State University. (Co-PI Dr. Sunethra Dharmasiri $14,500.00)

2005: Structural requirements necessary for auxin activity. Research Enhancement Grant, Texas State University, San Marcos. ($ 8000.00).

Fellowships, Awards, Honors:

2010 - Runner-up for the Presidential award for excellence in scholarly/creative activities, Texas State University-San Marcos.

2009 – National Science Foundation CAREER award.

2009 - Runner-up for the Presidential award for excellence in scholarly/creative activities, Texas State University-San Marcos.

2006 - Runner-up for the Presidential award for excellence in scholarly/creative activities, Texas State University-San Marcos.

2005 – *Science* citation. Runner-up # 2 Breakthrough Research in Science 2005.

2005 – Dharmasiri et al. (2005) Nature. *This paper was cited as number 1 of the top ten papers in Biology by the Faculty of 1000*.

2005 – Dharmasiri et al (2005) Dev. Cell. *This paper was cited among the most viewed top ten papers in Biology by the Faculty of 1000*.

2003 - Dharmasiri et al. (2003) Curr. Biol. *This paper was cited among top ten papers in biology by Faculty of 1000*

1998 - 1998: Postdoctoral fellowship, Dept. of Plant Molecular Physiology / Biosystems Engineering, University of Hawaii, USA.

1987 – 1988: Practical training award, Overseas Development Administration, England.

1972 – 1982: National Scholarship, Ministry of Education, Sri Lanka.

SERVICE

University: Served as,

(1) Adjunct/Affiliated faculty for the MS program in Family and Consumer Science (FCS), TXST.
(2) Member Institutional Biosafety Committee (IBC), TXST.

Departmental:

Served in the following departmental committees:

(3) Undergraduate committee, Biology Department, TXST
(4) Greenhouse committee, Biology Department, TXST
(5) Target of Opportunity committee, Biology Department, TXST
(6) Departmental Seminar committee (Chair-from fall 2008 – spring 2009; 2014), Biology Department, TXST
(7) Faculty mentoring committee- Hong-Gu Kang.
(8) Colene Drace Cell Biology Award Committee (2006 to present)
(9) Eben-Ellege Award Committee (2006 to present)
(10) Presidential upper level Scholarship selection committee (2008)
(9) Biology Department Colloquium Committee (2009)
(10) Cell Biology Search Committee (2010)

Community:

Mentored 11 High School students on auxin related research projects from 2007 - 2018.

Professional:

Reviewed multiple grants for,

i) ***National Science Foundation, USA***
ii) ***FWF (Austrian Science Fund)***
iii) ***USDA***

Reviewed multiple manuscripts for following Journals
Nature reviews; ***Plant Physiology***; ***Plant Science***; ***Plant journal***; ***Australian Journal of Science Trends in Plant Sciences; Genetics; Journal of Experimental Botany; Molecular Plant; Plant Molecular Biology; Acta Biologia Cracoviensia; Physiologia Plantarum; PLoS One; PLoS Genetics; Plant Cell; Functional Plant Biology; Frontiers in Plant Physiology; Essays in Biochemistry; Plant Cell & Physiology; Pest Management; F1000Research; Plants; International Journal of Molecular Sciences; BMC Plant Biol., Agriculture.***

Editorial

Review Editor - ***Frontiers in Plant Physiology***.
Guest Editor – ***Agriculture –*** *Special Topic – "Auxin mediated regulation of growth and development of plants"*

Service to other organizations

Southern Section Representative (2020 – 2023) - ***American Society of Plant Biologists***
Membership Committee (2020-2023) - ***American Society of Plant Biologists***
Member (2020-2023) - ***American Society of Plant Biologists Council***

Executive Committee Member (2018-2021) ***American Society of Plant Biologists-Southern Section.***
Chair (2017-2018) - ***American Society of Plant Biologists-Southern Section.***
Vice chair (2016-2017) - ***American Society of Plant Biologists-Southern Section.***
Secretary/Treasurer (2015-2016) – ***American Society of Plant Biologists-Southern Section.***
Treasurer/Board of Directors – ***Thapovanaye International Buddhist Center, Ventura, CA.***

Evaluator of final faculty candidates for Agricultural Biological Research Center (ABRC), Academia Sinica, Taiwan.

External Examiner – Ph.D. Dissertations -
Karunya Institute of Technology and Sciences, Coimbatore – India

Professional memberships:

Member: American Association for the Advancement of Science
Member: American Society of Plant Biologists
Member: Plant Growth Regulators Society of America
Member: Southern Section of the American Society of Plant Biologists.